

metal such as Sn, Cu, Co, or Fe . . . on the second surface of the anode backing” and, regarding Claim 5, that each of these metals has at least two oxidation states in the range of 1 and 4.

Applicants has amended Claims 1-5 to overcome the rejection as anticipated by Uchida et al. As now amended, Claim 1 recites “oxidation catalyst layer effective to catalyze the oxidation of CO by oxygen present in the fuel stream where at least the layer of oxidation catalyst consists essentially of a non-precious metal oxidation catalyst selected from the group consisting of Cu, Fe, Co, Tb, W, Mo, Sn, and oxides thereof.” (emphasis added). Claim 5 recites “the second surface consists essentially of an oxidation catalyst layer effective to catalyze the oxidation of CO by oxygen present in the fuel stream where at least the layer of oxidation catalyst is formed from a metal having at least two oxidation states in the range of 1-4.” (emphasis added). Applicants have found that platinum is not needed in the oxidation layer to oxidize CO in the fuel stream sufficient to prevent CO poisoning of platinum as the electrocatalyst for the hydrogen reaction. Claims 1 and 5 now exclude platinum as a component of the oxidation catalyst.

Uchida et al. recite in Claim 4, and teach in paragraph [0007], that the carbon monoxide-oxidizing catalyst “is composed of platinum and at least one element selected from the group consisting of ruthenium, tin, osmium, rhodium, palladium, nickel, copper, cobalt, manganese, zinc, iridium, and iron.” Likewise, at paragraph [0027] Uchida et al. teach that “multi-component catalysts using platinum and elements selected from tin, palladium, nickel, copper, cobalt, manganese, zinc, iron, iridium, osmium, and rhodium are also effective.” (emphasis added). Thus, the catalysts taught by Uchida et al. require the presence of platinum with the second metal to form a multi-component catalyst.

Applicant’s claimed invention excludes platinum from the oxidation catalyst layer. There is no showing or suggestion in Uchida et al. or in the references of record in this case that non-precious metal catalysts *per se*, as claimed by applicant, will be effective to oxidize CO in fuel cell operations.

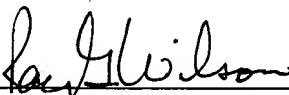
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Applicants respectfully request that the Examiner allow Claims 1-5, as amended, and to pass this case to issue.

Applicants' attorney would be pleased to discuss any of the issues in this case if the Examiner concludes such a discussion would assist in moving the case to allowance.

Respectfully submitted,

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